

Data Description for Davis Pond Oyster Growth and Mortality Studies

General:

The Louisiana Department of Wildlife and Fisheries (LDWF) measures oyster growth and mortality rates in the public oyster grounds by placing Nestier trays at 12 fixed locations in the Barataria Basin. Twenty oysters are glued to each tray and two trays are placed at each station beginning in January. Monthly observations track the survival of the oysters. Approximately four times per year, shell length measurements are recorded to report growth. The 2001 mortality data begin in March, not January.

Data Column Descriptions:

Station: Map 2003-04-0323.pdf shows the locations of the 12 stations. The geographic coordinates of the stations are given in the table below.

Station	Latitude	Longitude
201	29° 16' 57"	89° 59' 16"
202	29° 16' 24"	90° 08' 11"
203	29° 20' 37"	90° 07' 38"
204	29° 24' 16"	90° 01' 21"
205	29° 28' 13"	90° 05' 57"
206	29° 29' 22"	90° 01' 28"
207	29° 27' 35"	89° 58' 06"
208	29° 27' 49"	89° 54' 01"
209	29° 24' 41"	89° 50' 15"
210	29° 19' 54"	89° 53' 47"
211	29° 20' 39"	89° 56' 26"
212	29° 17' 04"	89° 56' 17"

Date: mm/dd/yyyy

Salinity: Reported in grams per liter (parts per thousand), based on conductivity measurements at the depth of immersion of the Nestier trays.

Water temperature: Measured by thermocouple at the depth of immersion of the Nestier trays, in degrees celsius.

Oyster Number: Each tray supports twenty oysters, each identified by number.

Tray: Each year, LDWF installs two trays, identified as A and B, at each station.

Card Type: A "B" card is used to record shell length measurements ("growth") as well as survival ("status") data on each oyster. An "A" card records only survival data.

Oyster Status: The survival status of each oyster may be recorded as one of the following: “live” (signified by a blank entry), “dead”, “missing”, “silted”, or “vandalized”.

Month for Status: This column reports the month in which an oyster is first observed dead, missing, or vandalized. The entry persists until the beginning of the next year (when new trays are installed), unless a missing oyster is found or replaced, or a dead or vandalized oyster is replaced. That is, if an oyster is first observed dead in April, every monthly entry through December is “4”. If a tray of oysters missing since April is found in August, the entry only persists through July.

Growth: Shell length measurements (hinge to beak) in millimeters. See notice below concerning replacement trays.

Replacements: This column reports instances of lost (“missing”) trays being found mid-year, and instances of lost, vandalized, or dead oysters being replaced mid-year. *Users of this data set must apply a complex interpretation to growth data when a dead or lost tray is replaced. One month’s entry applies to two different sets of oysters, the dead or missing tray (“status” and “month for status”) and the new tray (“growth”). Example: In February of 1991, LDWF biologists visited Station 2 and found Tray B missing and replaced Tray B with twenty new oysters. The “status” and “month for status” columns report the original oysters as “missing” and “02” respectively. The “growth” column, however, reports the initial lengths of the new oysters.*